Atmos. Meas. Tech. Discuss., 3, C2642–C2643, 2011
www.atmos-meas-tech-discuss.net/3/C2642/2011/

Atmospheric Measurement Techniques Discussions

Interactive comment on "Comparison of ground-based FTIR and Brewer O_3 total column with data from two different IASI algorithms and from OMI and GOME-2 satellite instruments" *by* C. Viatte et al.

Anonymous Referee #2

Received and published: 6 February 2011

Review on the paper:

Comparison of ground-based FTIR and Brewer O3 total column with data from two different IASI algorithms and from OMI and GOME-2 satellite instruments

By Viatte et al.

The papers describes the comparison of O3 measurements of ground-based observations with satellite observations in different spectral regions. The paper is well written

and appropriate for AMT. I have two comments:

Major comment: The difference between the different observations can be assigned to the different spectral regions. This is well known from laboratory measurements. Combining different spectral regions nearly inhibits a comparison and validation of the ground-based and satellite instruments. I suggest that the problems of the laboratory measurements in the different spectral regions are discussed in much more detail. This could form the basis of paper, and the validation should be discussed with respect to this discussion.

Minor comment: With all the measurements performed at the site, Izana is a super site, I agree. But I do not agree that it is well suited for satellite validation. Single point measurements from a mountain site are always very difficult to be compared to satellite studies with their large spatial pixel site. This holds also for stratopheric trace gase because air masses are uplifted when passing a mountain site. This should be discussed and modified in the text.

Interactive comment on Atmos. Meas. Tech. Discuss., 3, 5833, 2010.